



**Annex A: System Check**

**Tested Model : X522**

**Report Number:  
FCC17010001A-6**

# MEASUREMENT 1

## BODY

Type: Validation measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 11 minutes 54 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW835</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

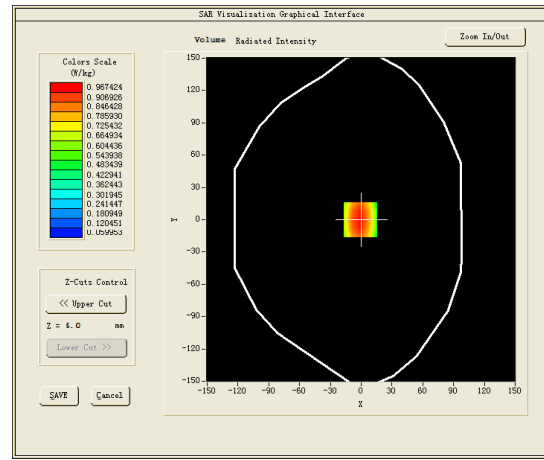
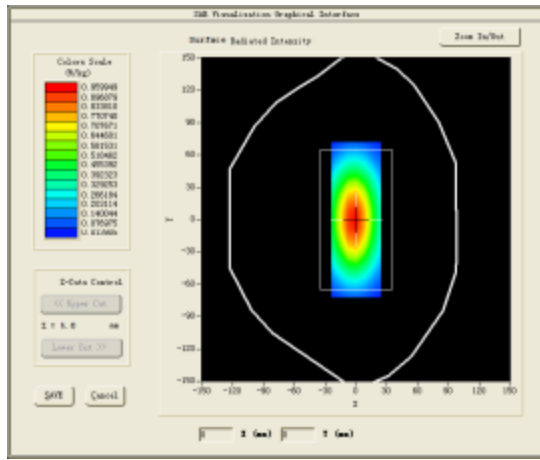
### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	835.000000
<b>Relative permittivity (real part)</b>	53.927799
<b>Relative permittivity (imaginary part)</b>	21.281300
<b>Conductivity (S/m)</b>	0.987216
<b>Variation (%)</b>	0.120000

## SURFACE SAR

## VOLUME SAR

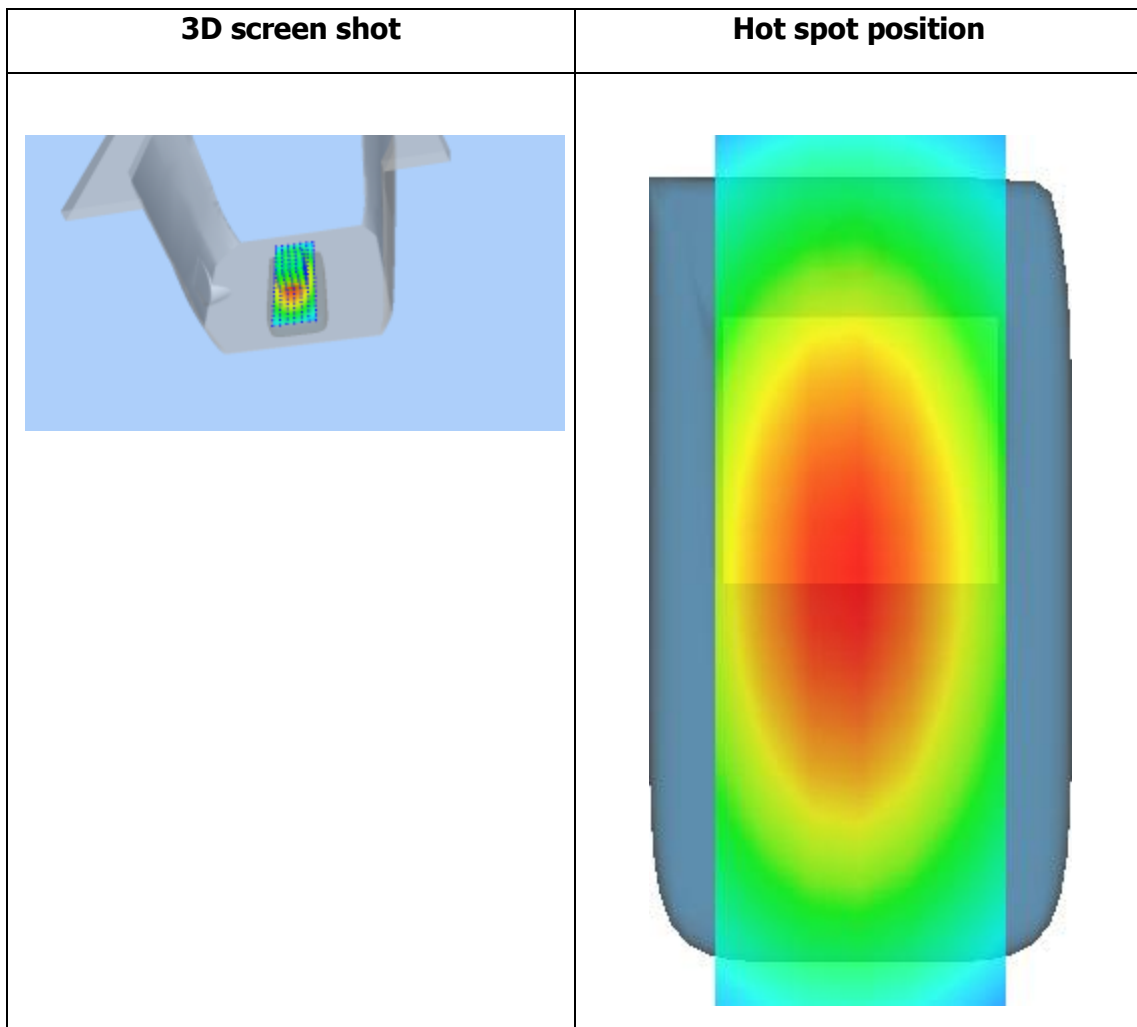
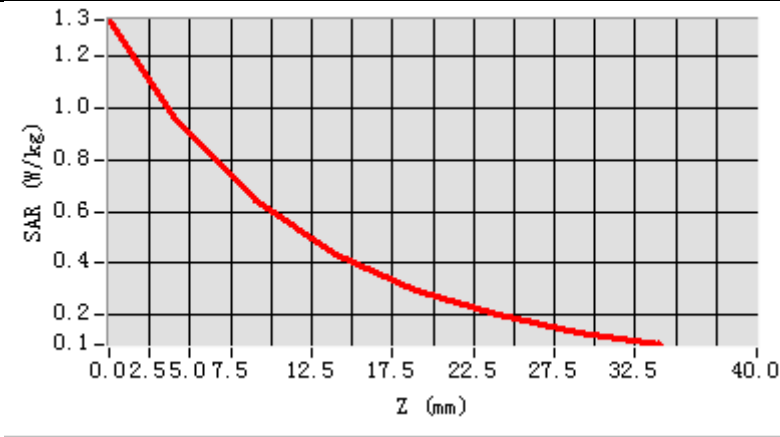


**Maximum location: X=-1.00, Y=0.00**

**SAR Peak: 1.44 W/kg**

<b>SAR 10g (W/Kg)</b>	6.44746
<b>SAR 1g (W/Kg)</b>	10.14583

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.3418</b>	<b>0.9674</b>	<b>0.6426</b>	<b>0.4358</b>	<b>0.2947</b>	<b>0.1989</b>	<b>0.1326</b>



## MEASUREMENT 2

### HEAD

Type: Validation measurement (Complete)

Date of measurement: 5/1/2017

Measurement duration: 11 minutes 54 seconds

#### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW835</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

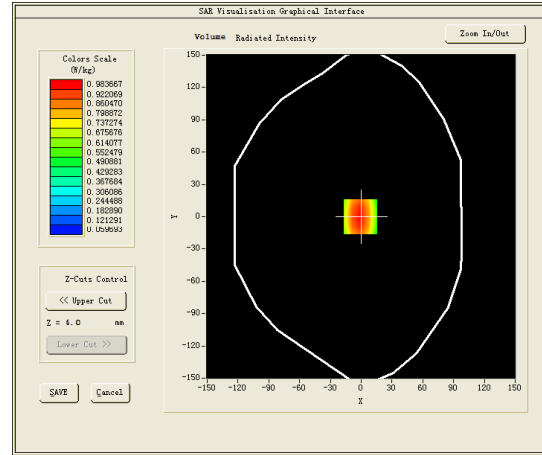
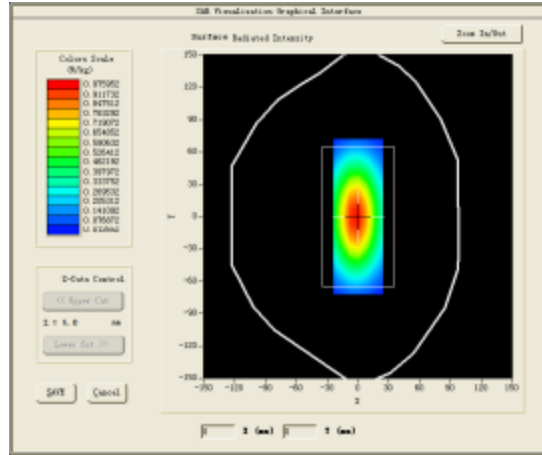
#### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	835.000000
<b>Relative permittivity (real part)</b>	40.328999
<b>Relative permittivity (imaginary part)</b>	19.880501
<b>Conductivity (S/m)</b>	0.922234
<b>Variation (%)</b>	-0.070000

## SURFACE SAR

## VOLUME SAR

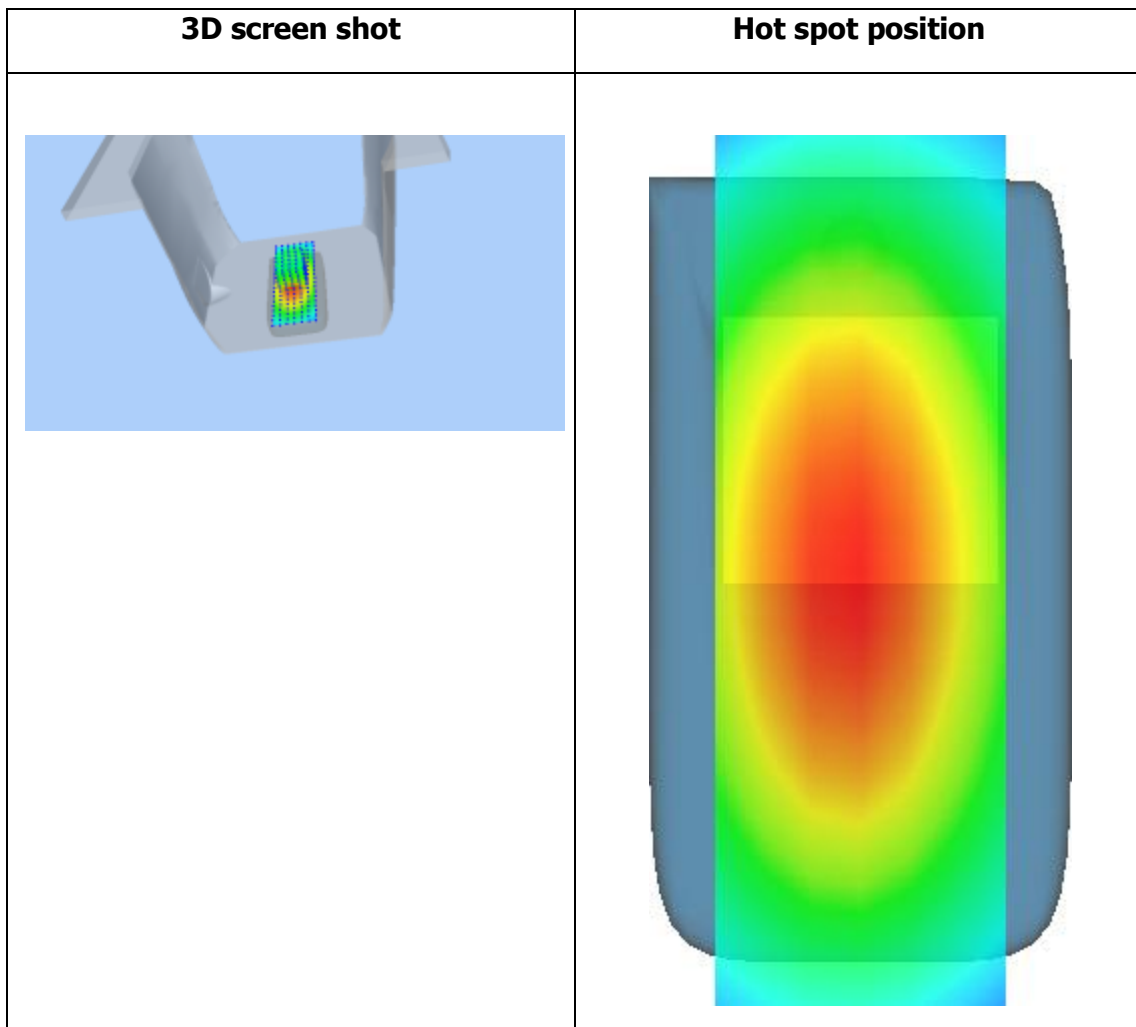
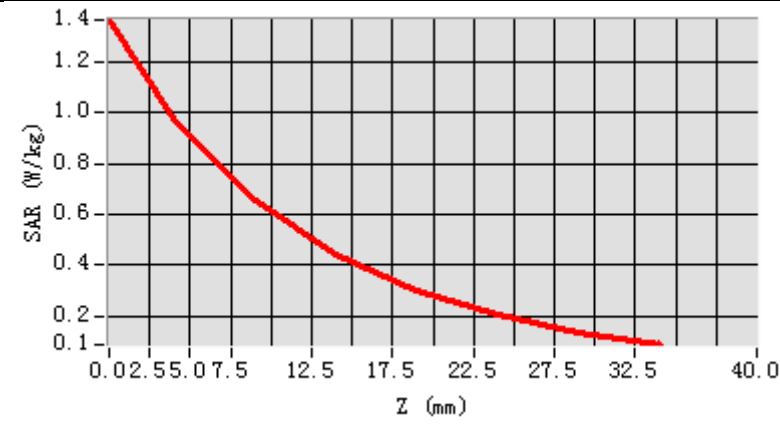


**Maximum location: X=-1.00, Y=0.00**

**SAR Peak: 1.37 W/kg**

<b>SAR 10g (W/Kg)</b>	6.15004
<b>SAR 1g (W/Kg)</b>	9.70049

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.3669</b>	<b>0.9837</b>	<b>0.6529</b>	<b>0.4412</b>	<b>0.2993</b>	<b>0.2017</b>	<b>0.1343</b>



## MEASUREMENT 3

### BODY

Type: Validation measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 11 minutes 43 seconds

#### **A. Experimental conditions.**

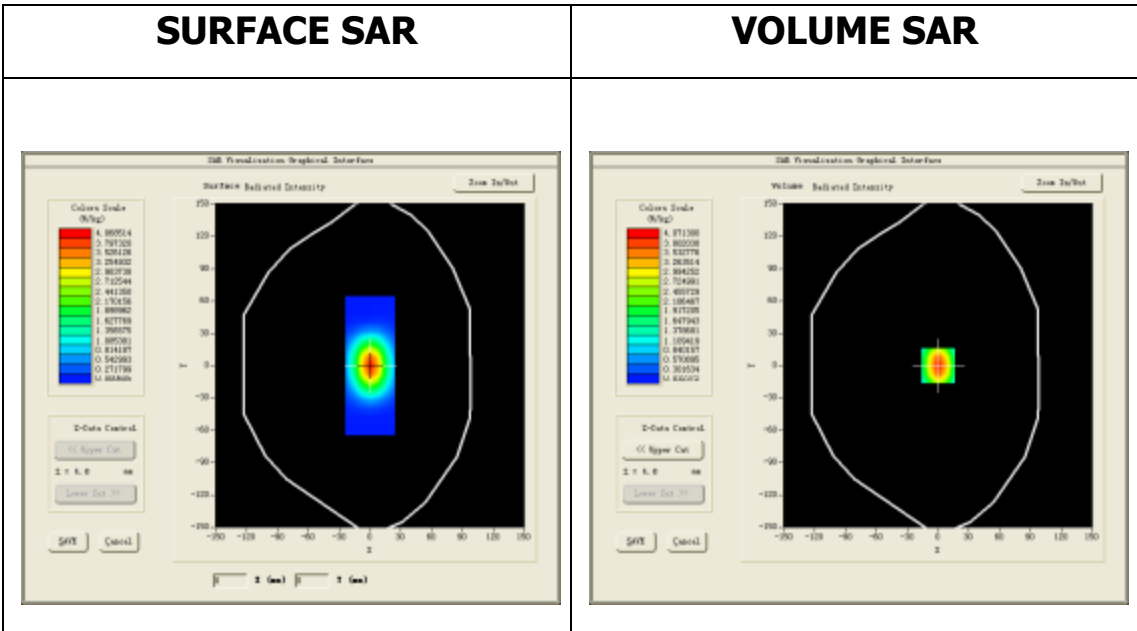
<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW1800</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

#### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	1800.000000
<b>Relative permittivity (real part)</b>	52.970200
<b>Relative permittivity (imaginary part)</b>	15.414900
<b>Conductivity (S/m)</b>	1.541490
<b>Variation (%)</b>	-0.080000



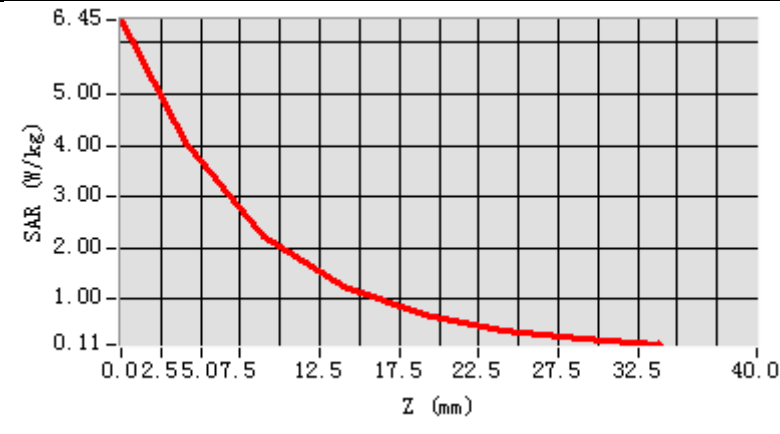


**Maximum location: X=0.00, Y=0.00**

**SAR Peak: 6.86 W/kg**

<b>SAR 10g (W/Kg)</b>	21.71523
<b>SAR 1g (W/Kg)</b>	41.55761

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>6.4478</b>	<b>4.0713</b>	<b>2.2310</b>	<b>1.2495</b>	<b>0.7043</b>	<b>0.3895</b>	<b>0.2089</b>



3D screen shot	Hot spot position
<p>A 3D perspective view of a grey, L-shaped device. A small rectangular area on the inner surface of the 'L' is highlighted with a color gradient from blue to red, representing the hot spot location.</p>	<p>A 2D vertical cross-section visualization of the hot spot. It shows a central red/orange oval shape surrounded by concentric rings of yellow, green, and cyan, all set against a blue background. This represents the intensity distribution of the hot spot.</p>

## MEASUREMENT 4

### HEAD

Type: Validation measurement (Complete)

Date of measurement: 6/1/2017

Measurement duration: 11 minutes 41 seconds

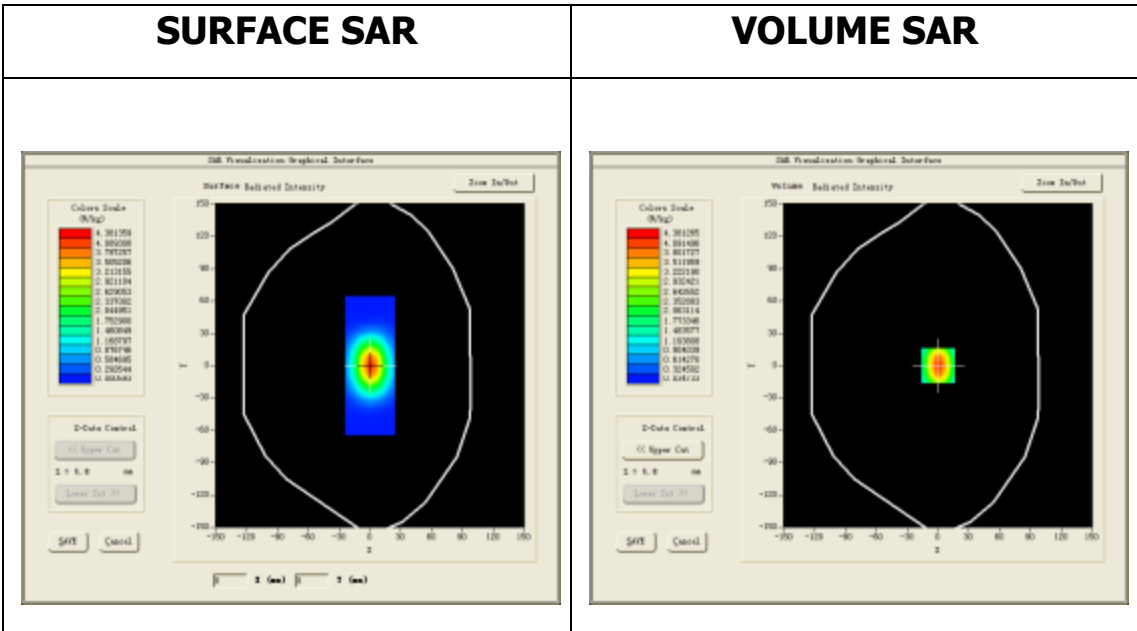
#### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW1800</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

#### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	1800.000000
<b>Relative permittivity (real part)</b>	39.484501
<b>Relative permittivity (imaginary part)</b>	14.358300
<b>Conductivity (S/m)</b>	1.435830
<b>Variation (%)</b>	0.610000

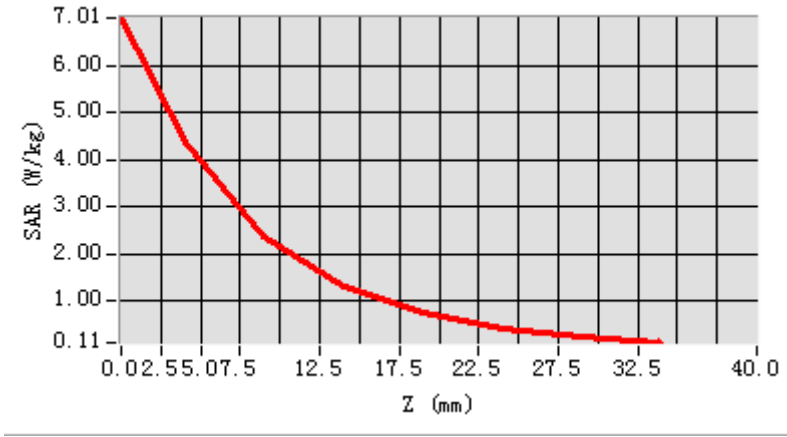


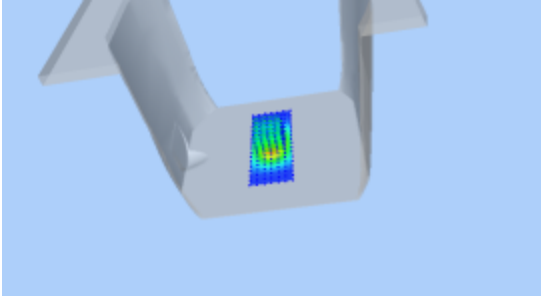
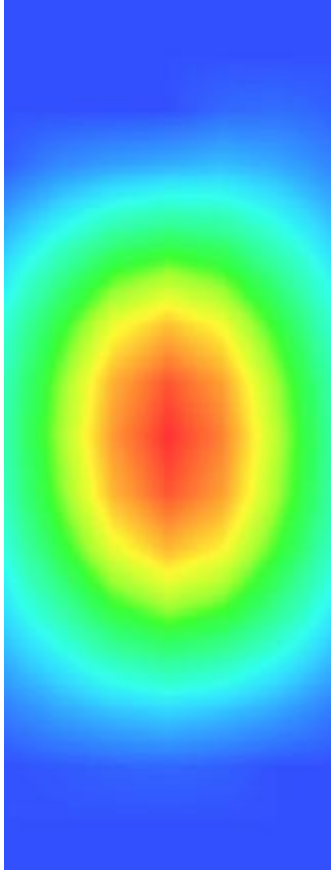
**Maximum location: X=0.00, Y=0.00**

**SAR Peak: 6.95 W/kg**

<b>SAR 10g (W/Kg)</b>	20.60484
<b>SAR 1g (W/Kg)</b>	39.98096

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>7.0118</b>	<b>4.3813</b>	<b>2.3674</b>	<b>1.3177</b>	<b>0.7415</b>	<b>0.4093</b>	<b>0.2206</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D perspective view of a grey, L-shaped device. A small rectangular area on the inner surface of the 'L' is highlighted with a color gradient from blue to red, indicating a hot spot.</p>	 <p>A vertical heatmap showing the spatial distribution of the hot spot. The center is a bright red oval, surrounded by concentric rings of yellow, green, and cyan, all set against a dark blue background.</p>

# MEASUREMENT 5

## BODY

Type: Validation measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 10 minutes 57 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW1900</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

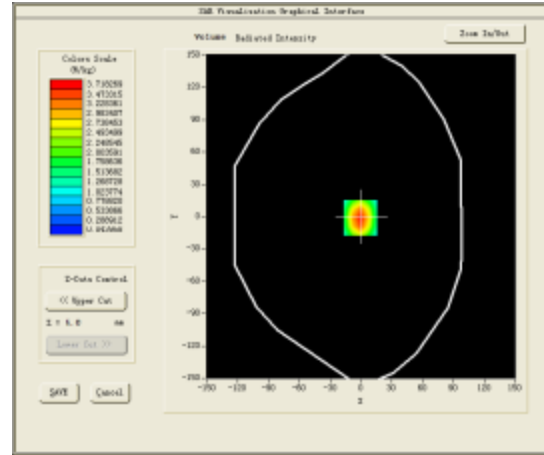
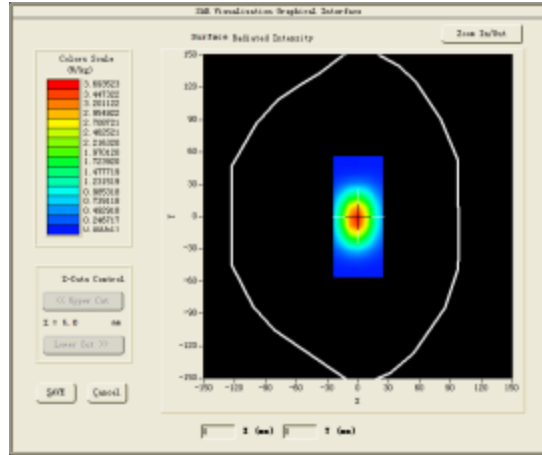
### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	1900.000000
<b>Relative permittivity (real part)</b>	53.365299
<b>Relative permittivity (imaginary part)</b>	14.757600
<b>Conductivity (S/m)</b>	1.557747
<b>Variation (%)</b>	-0.450000

## SURFACE SAR

## VOLUME SAR

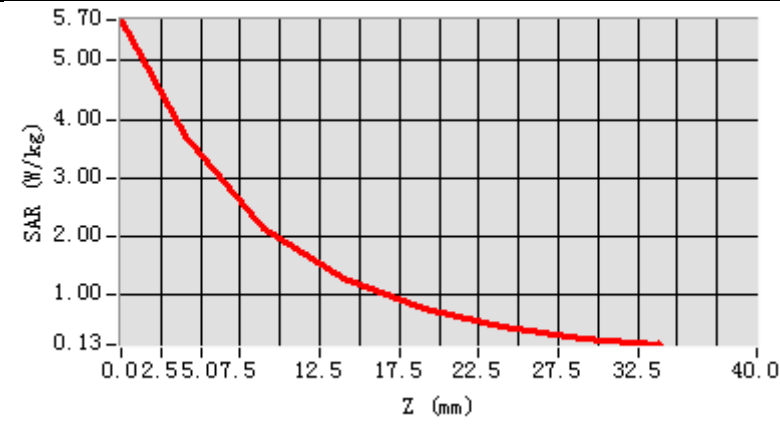


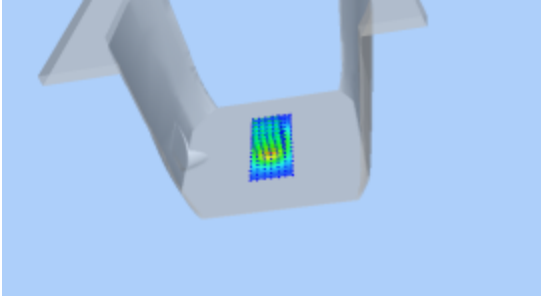
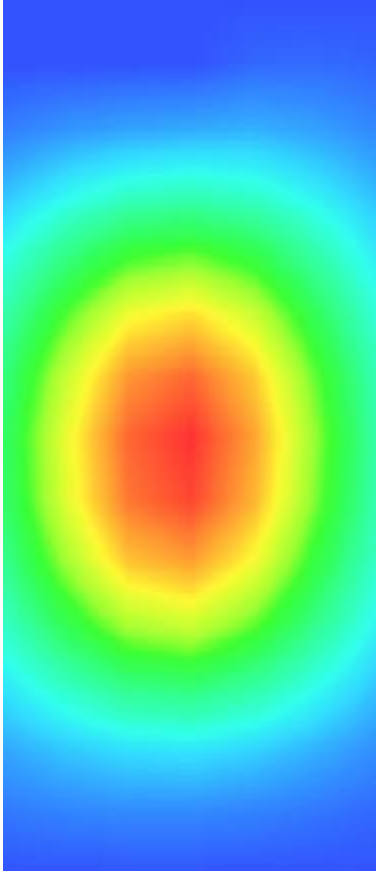
**Maximum location: X=-1.00, Y=-1.00**

**SAR Peak: 6.26 W/kg**

<b>SAR 10g (W/Kg)</b>	20.93533
<b>SAR 1g (W/Kg)</b>	39.32904

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>5.7034</b>	<b>3.7183</b>	<b>2.1347</b>	<b>1.2560</b>	<b>0.7338</b>	<b>0.4260</b>	<b>0.2429</b>



3D screen shot	Hot spot position
 <p>A 3D perspective view of a grey, L-shaped device. A small rectangular area on the horizontal part of the device is highlighted with a color gradient from blue to red, indicating a hot spot.</p>	 <p>A 2D heatmap visualization of the hot spot. It shows a circular gradient where the center is red (highest intensity) and the intensity decreases through yellow and green to blue (lowest intensity) at the edges.</p>



# MEASUREMENT 6

## HEAD

Type: Validation measurement (Complete)

Date of measurement: 7/1/2017

Measurement duration: 11 minutes 6 seconds

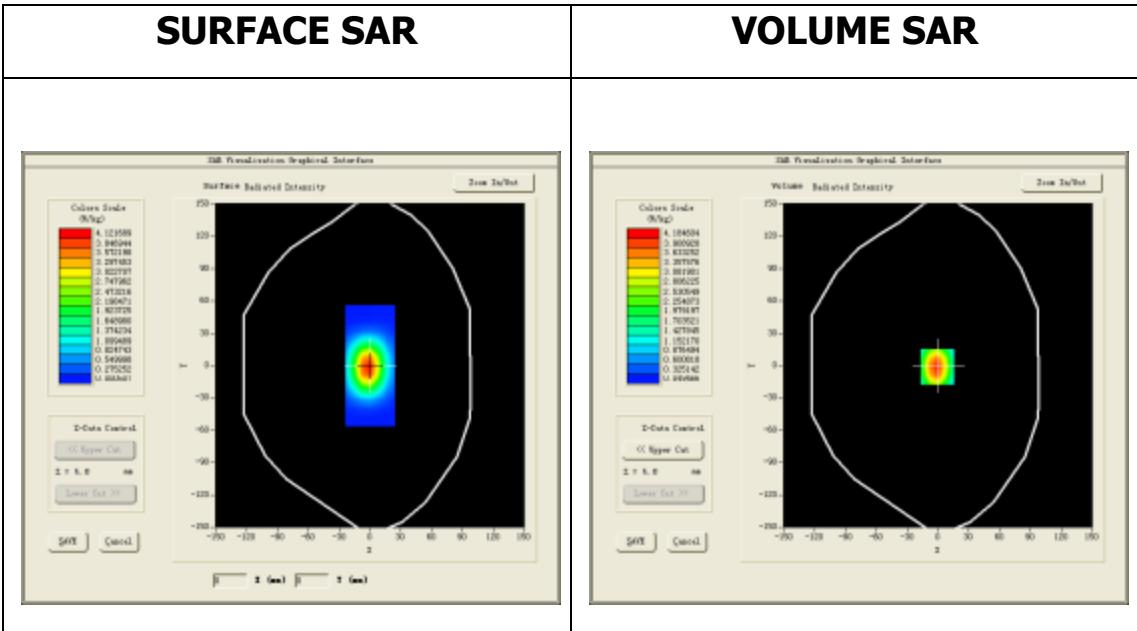
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW1900</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	1900.000000
<b>Relative permittivity (real part)</b>	39.976398
<b>Relative permittivity (imaginary part)</b>	13.386300
<b>Conductivity (S/m)</b>	1.412998
<b>Variation (%)</b>	-0.040000

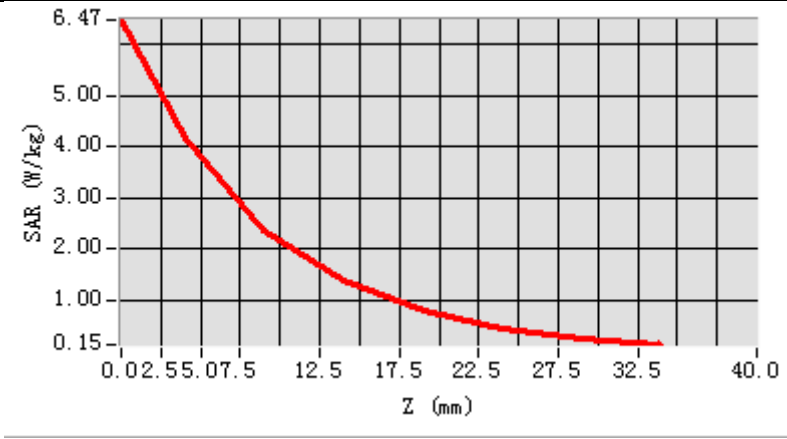


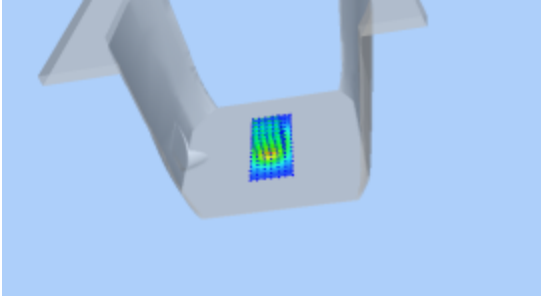
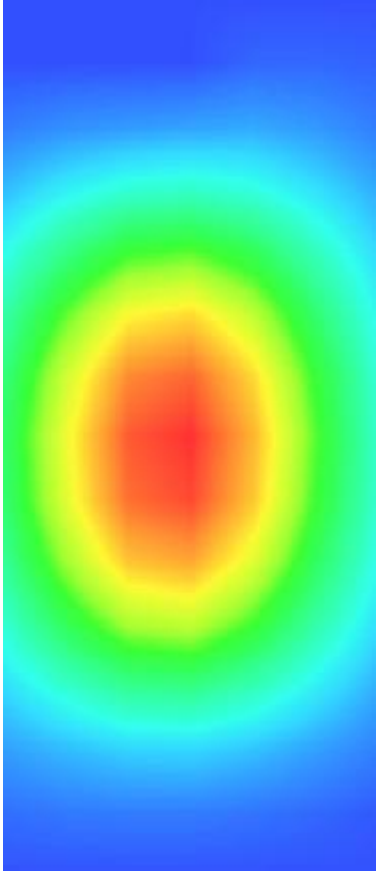
**Maximum location: X=-1.00, Y=-1.00**

**SAR Peak: 6.48 W/kg**

<b>SAR 10g (W/Kg)</b>	21.07104
<b>SAR 1g (W/Kg)</b>	39.97625

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>6.4693</b>	<b>4.1846</b>	<b>2.3780</b>	<b>1.3892</b>	<b>0.8084</b>	<b>0.4680</b>	<b>0.2662</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
	

# MEASUREMENT 7

## BODY

Type: Validation measurement (Complete)

Date of measurement: 9/1/2017

Measurement duration: 9 minutes 46 seconds

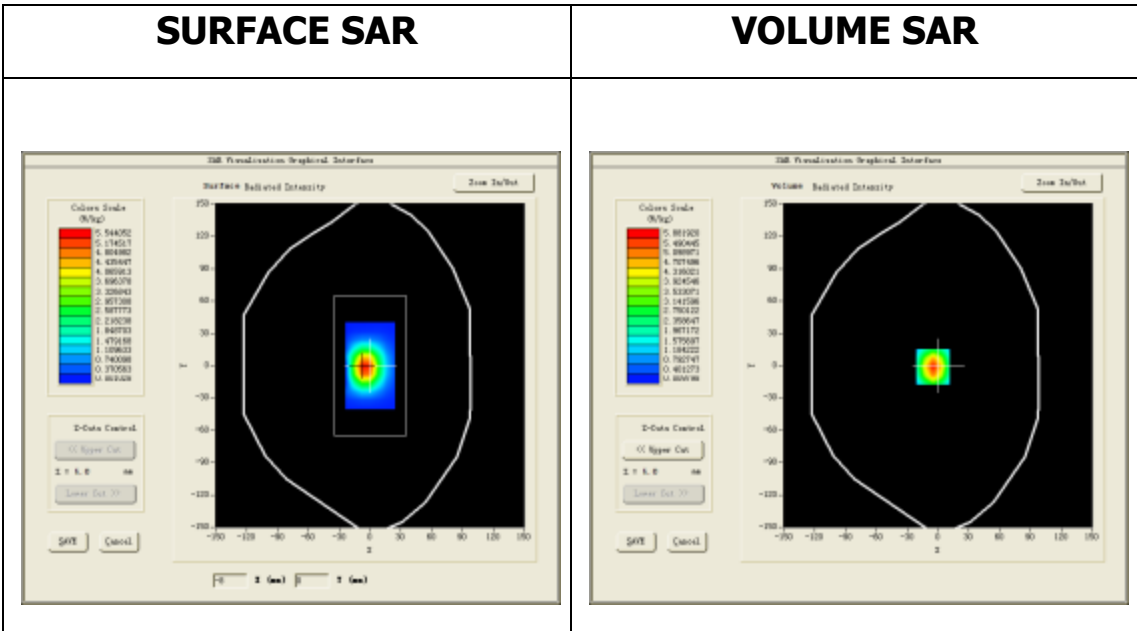
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW2450</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	2450.000000
<b>Relative permittivity (real part)</b>	52.735699
<b>Relative permittivity (imaginary part)</b>	14.017300
<b>Conductivity (S/m)</b>	1.907910
<b>Variation (%)</b>	0.390000

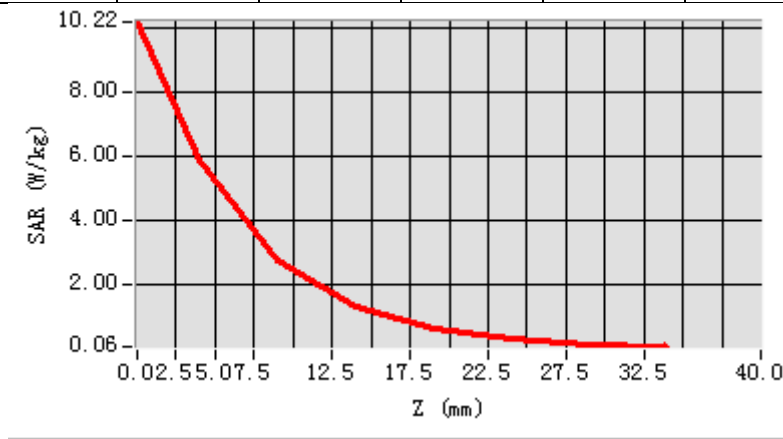


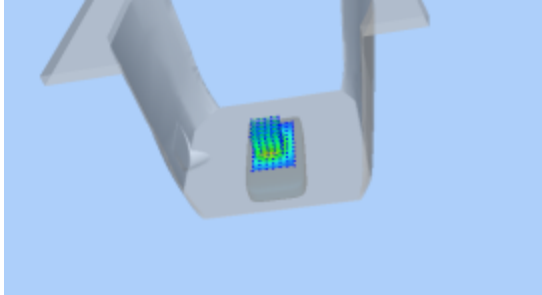
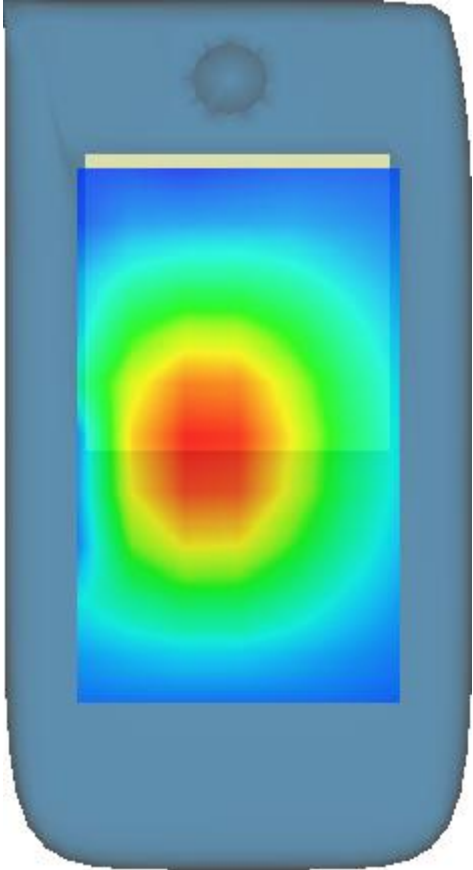
**Maximum location: X=-5.00, Y=-1.00**

**SAR Peak: 10.96 W/kg**

<b>SAR 10g (W/Kg)</b>	23.33453
<b>SAR 1g (W/Kg)</b>	54.33343

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>10.2188</b>	<b>5.8819</b>	<b>2.7478</b>	<b>1.3151</b>	<b>0.6266</b>	<b>0.2969</b>	<b>0.1341</b>



3D screen shot	Hot spot position
	

## MEASUREMENT 8

### HEAD

Type: Validation measurement (Complete)

Date of measurement: 9/1/2017

Measurement duration: 9 minutes 46 seconds

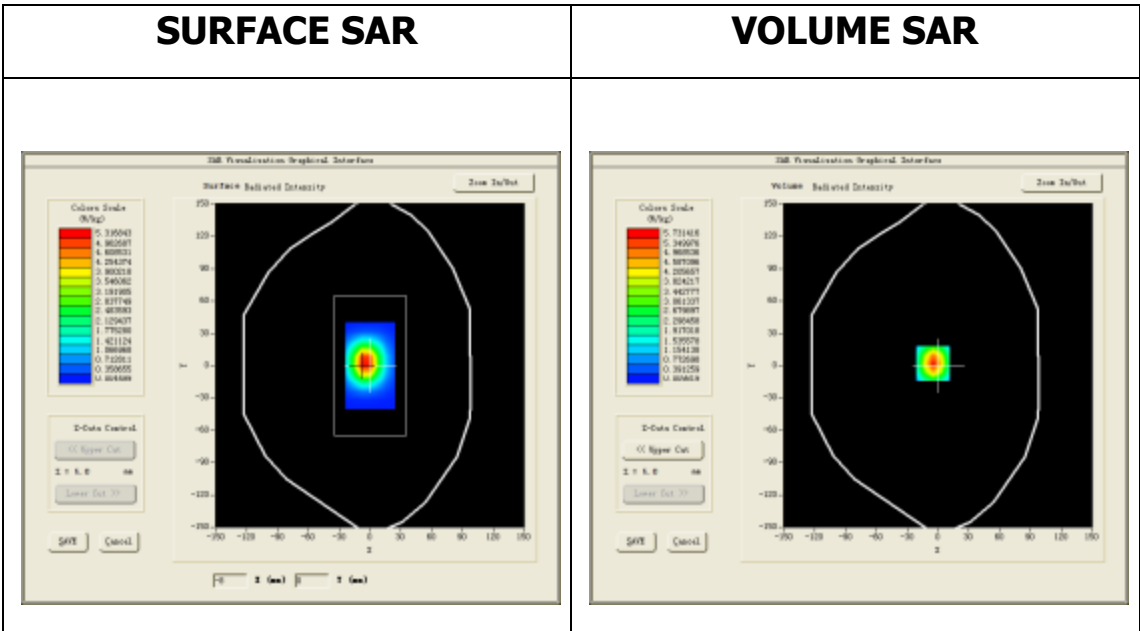
#### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm</u> <u>dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW2450</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

#### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	2450.000000
<b>Relative permittivity (real part)</b>	39.235699
<b>Relative permittivity (imaginary part)</b>	12.917300
<b>Conductivity (S/m)</b>	1.758188
<b>Variation (%)</b>	2.820000



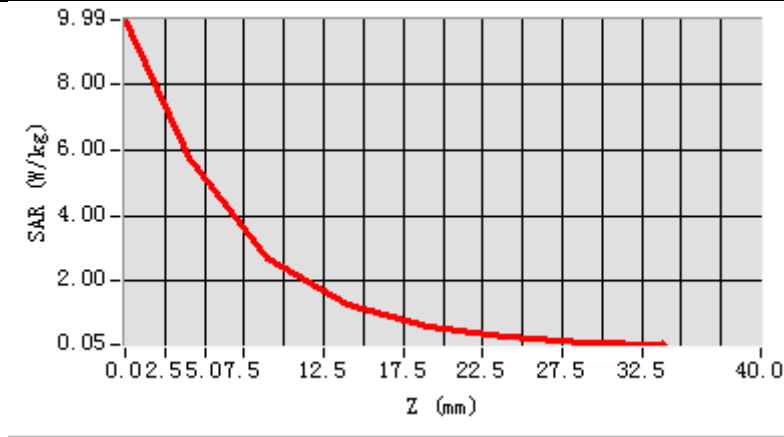
**Maximum location: X=-5.00, Y=2.00**

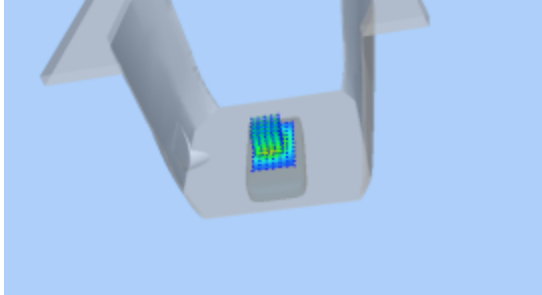
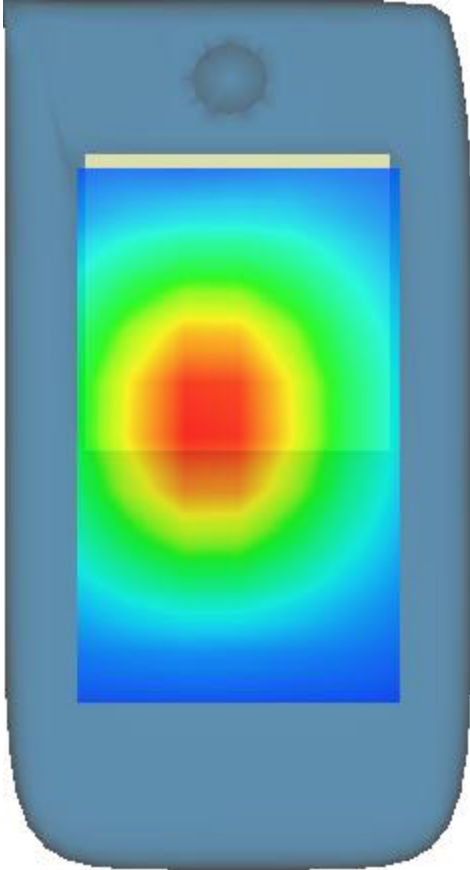
**SAR Peak: 9.92 W/kg**

<b>SAR 10g (W/Kg)</b>	24.52895
<b>SAR 1g (W/Kg)</b>	53.93069



<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>9.9915</b>	<b>5.7314</b>	<b>2.6626</b>	<b>1.2722</b>	<b>0.6047</b>	<b>0.2852</b>	<b>0.1274</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
 <p>A 3D CAD model of a mobile phone antenna array. The antenna is a rectangular patch with a grid of small elements. It is mounted on a grey substrate. The background is a light blue gradient.</p>	 <p>A 3D model of a mobile phone showing a heat map of SAR distribution. The phone is dark blue. A rectangular area on the back of the phone is highlighted with a color gradient from blue (low SAR) to red (high SAR), indicating the hot spot position. The hot spot is centered on the back of the phone.</p>

## MEASUREMENT 9

### BODY

Type: Validation measurement (Complete)

Date of measurement: 10/1/2017

Measurement duration: 10 minutes 13 seconds

#### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW2600</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

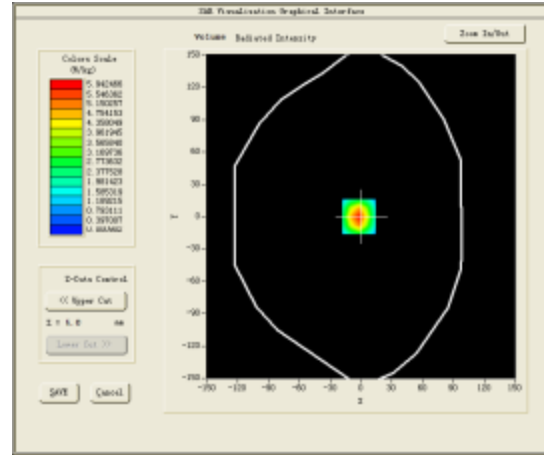
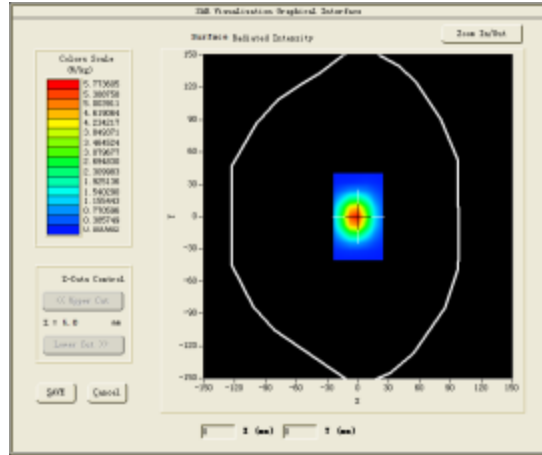
#### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	2600.000000
<b>Relative permittivity (real part)</b>	52.007900
<b>Relative permittivity (imaginary part)</b>	14.458500
<b>Conductivity (S/m)</b>	2.088450
<b>Variation (%)</b>	-0.220000

## SURFACE SAR

## VOLUME SAR

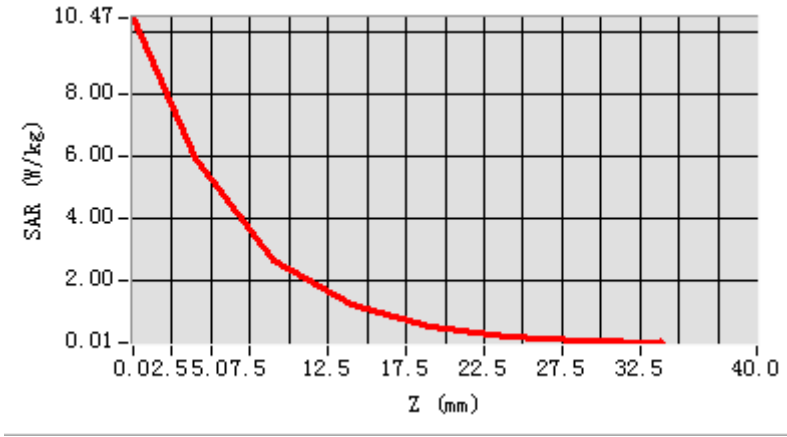


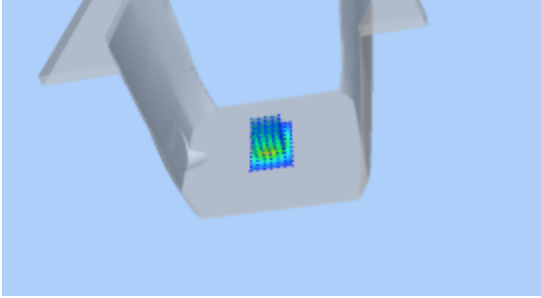
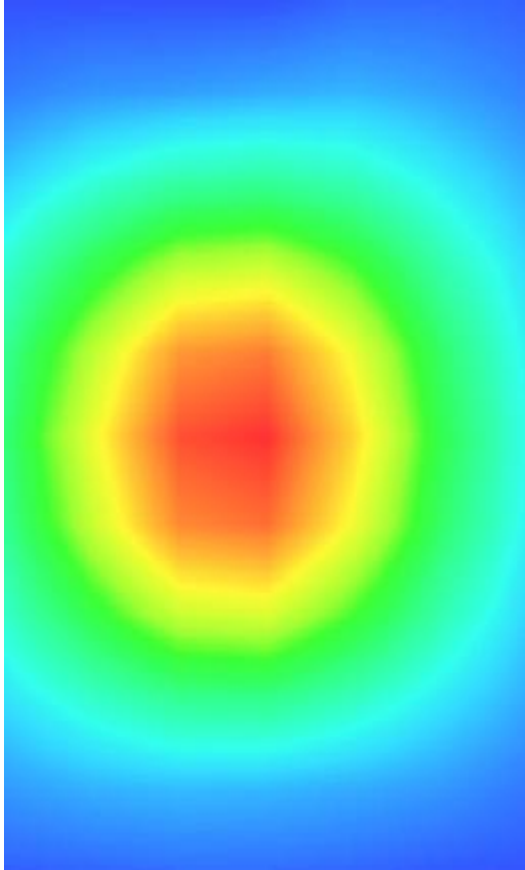
**Maximum location: X=-2.00, Y=0.00**

**SAR Peak: 10.74 W/kg**

<b>SAR 10g (W/Kg)</b>	25.59674
<b>SAR 1g (W/Kg)</b>	57.86435

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>10.4745</b>	<b>5.9425</b>	<b>2.6827</b>	<b>1.2126</b>	<b>0.5266</b>	<b>0.2069</b>	<b>0.0714</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
	

# MEASUREMENT 10

## HEAD

Type: Validation measurement (Complete)

Date of measurement: 10/1/2017

Measurement duration: 10 minutes 12 seconds

### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=8mm dy=8mm</u>
<b><u>ZoomScan</u></b>	<u>5x5x7,dx=8mm dy=8mm dz=5mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW2600</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

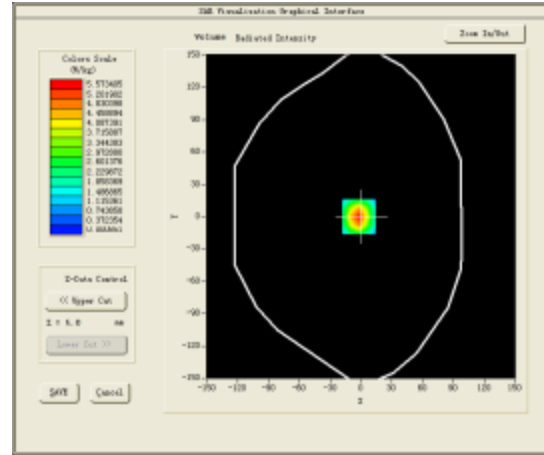
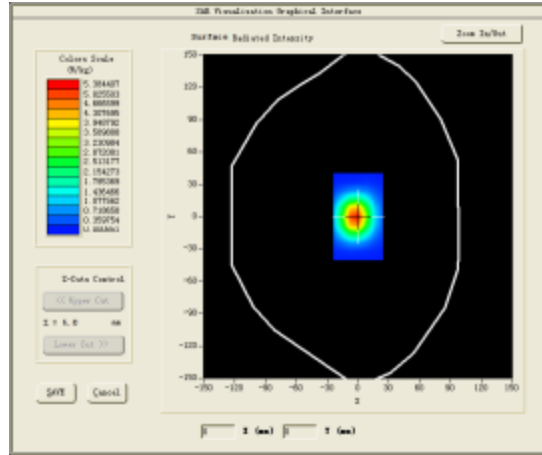
### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	2600.000000
<b>Relative permittivity (real part)</b>	38.979599
<b>Relative permittivity (imaginary part)</b>	13.989700
<b>Conductivity (S/m)</b>	2.020734
<b>Variation (%)</b>	0.250000

## SURFACE SAR

## VOLUME SAR

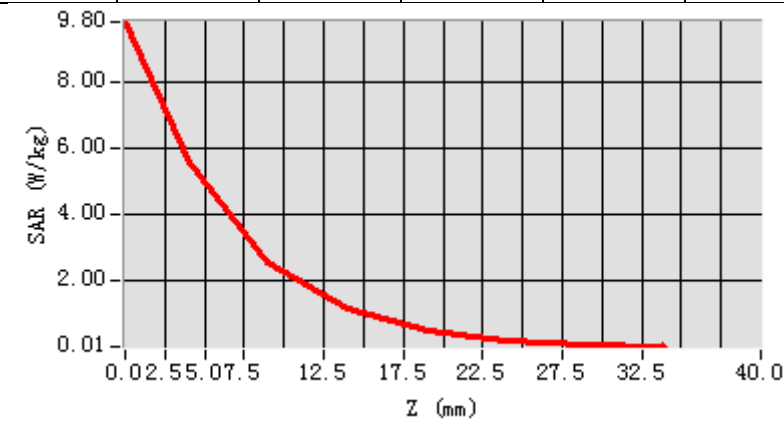


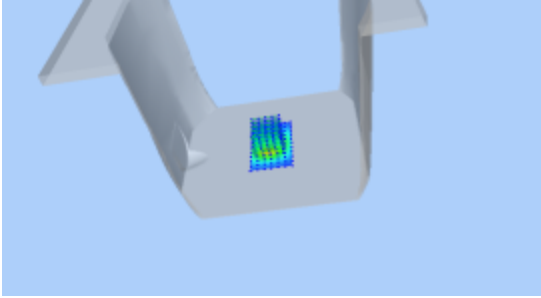
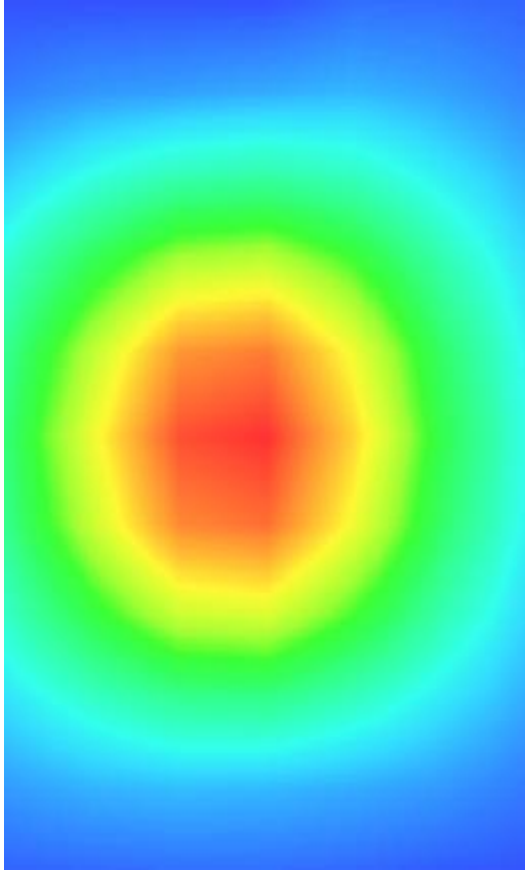
**Maximum location: X=-2.00, Y=0.00**

**SAR Peak: 9.73 W/kg**

<b>SAR 10g (W/Kg)</b>	23.42963
<b>SAR 1g (W/Kg)</b>	53.18259

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>9.8044</b>	<b>5.5734</b>	<b>2.5229</b>	<b>1.1430</b>	<b>0.4950</b>	<b>0.1964</b>	<b>0.0689</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
	

# MEASUREMENT 11

HEAD

Type: Validation measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 11 minutes 54 seconds

## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW5200</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

## **B. SAR Measurement Results**

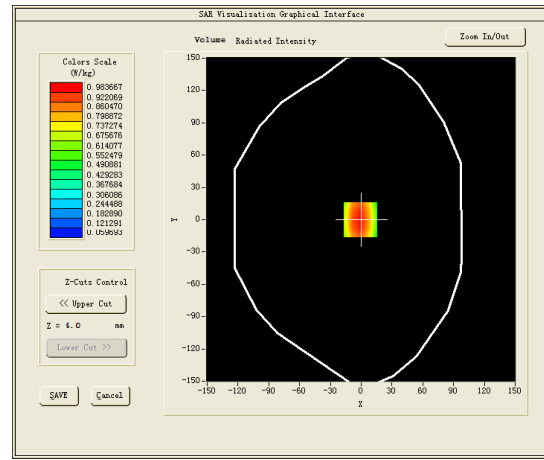
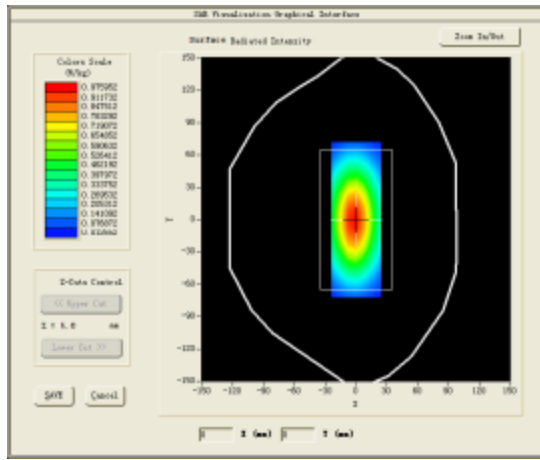
Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	5200.000000
<b>Relative permittivity (real part)</b>	35.553182
<b>Relative permittivity (imaginary part)</b>	16.497414
<b>Conductivity (S/m)</b>	4.773841
<b>Variation (%)</b>	-0.070000



## SURFACE SAR

## VOLUME SAR

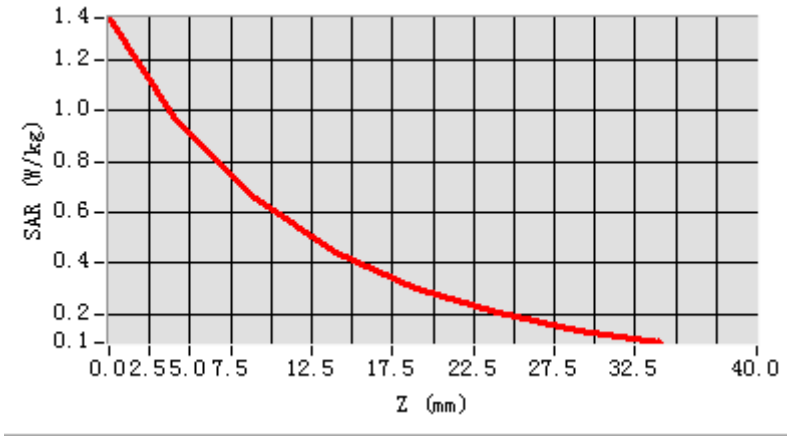


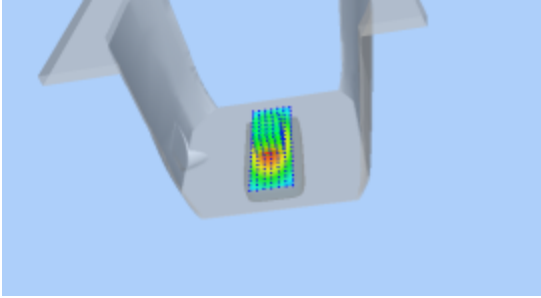
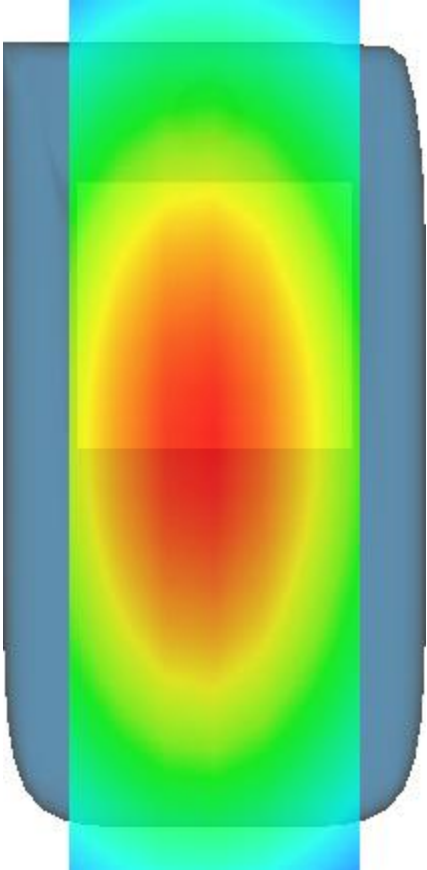
**Maximum location: X=-1.00, Y=0.00**

**SAR Peak: 1.37 W/kg**

<b>SAR 10g (W/Kg)</b>	56.79038
<b>SAR 1g (W/Kg)</b>	174.70083

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.3669</b>	<b>0.9837</b>	<b>0.6529</b>	<b>0.4412</b>	<b>0.2993</b>	<b>0.2017</b>	<b>0.1343</b>



<b>3D screen shot</b>	<b>Hot spot position</b>
	

# MEASUREMENT 12

BODY

Type: Validation measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 11 minutes 32 seconds

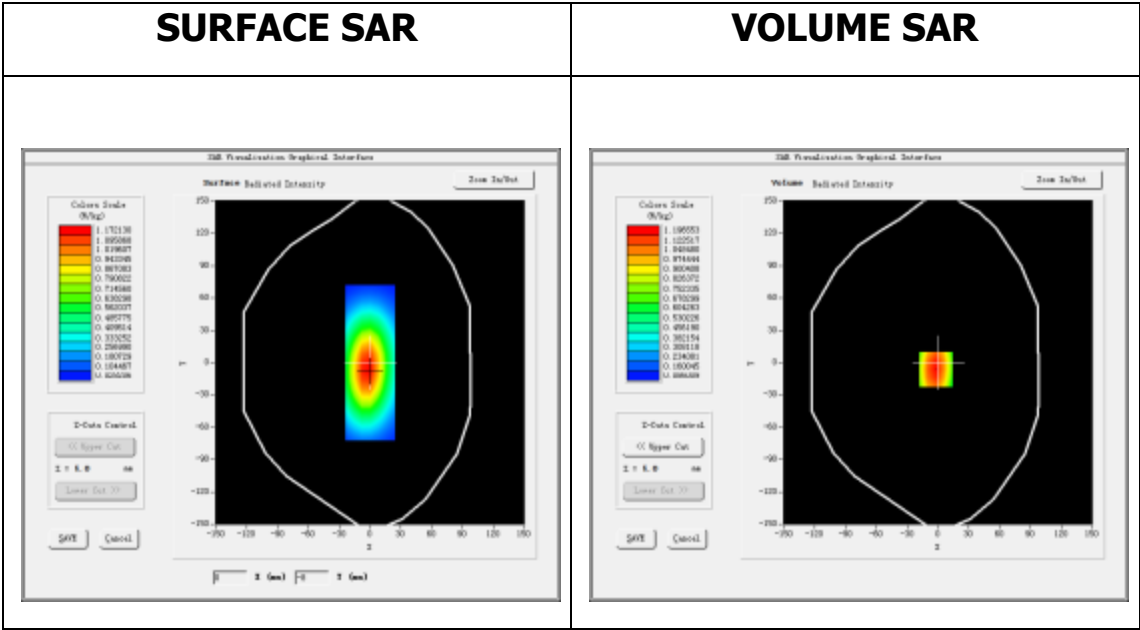
## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW5200</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

## **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	5200.000000
<b>Relative permittivity (real part)</b>	50.422599
<b>Relative permittivity (imaginary part)</b>	18.202492
<b>Conductivity (S/m)</b>	5.26371
<b>Variation (%)</b>	0.270000

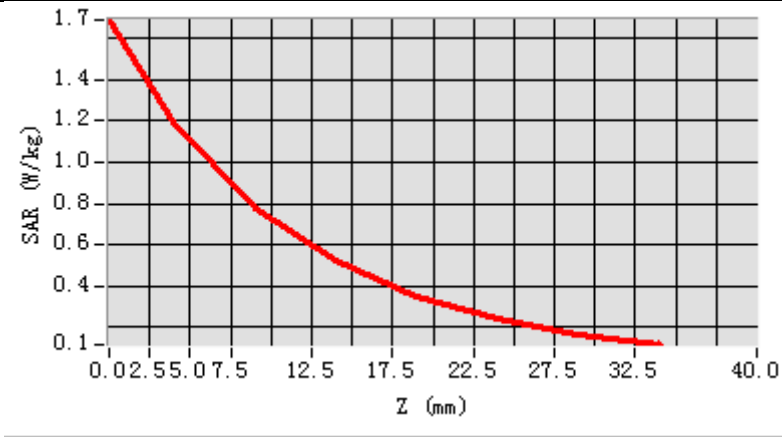


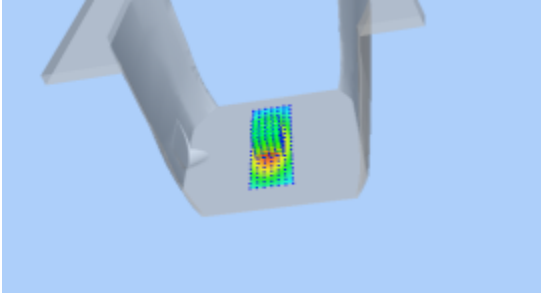
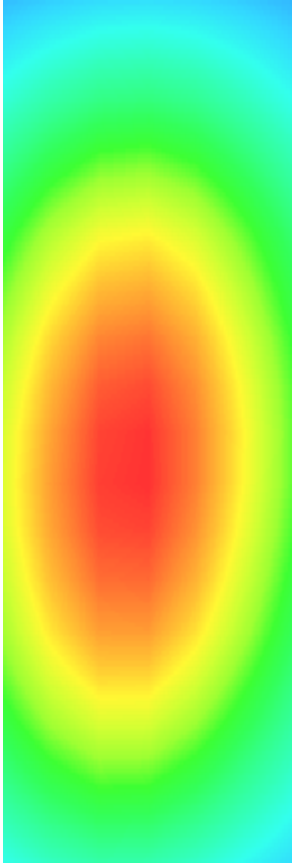
**Maximum location: X=-2.00, Y=-6.00**

**SAR Peak: 1.69 W/kg**

<b>SAR 10g (W/Kg)</b>	59.64065
<b>SAR 1g (W/Kg)</b>	167.17941

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>1.6911</b>	<b>1.1966</b>	<b>0.7784</b>	<b>0.5196</b>	<b>0.3518</b>	<b>0.2403</b>	<b>0.1660</b>



3D screen shot	Hot spot position
 <p>A 3D perspective view of a grey, L-shaped device. A small, rectangular area on the inner surface of the L-shape is highlighted with a color gradient from blue to red, indicating a hot spot. The background is a light blue gradient.</p>	 <p>A vertical, oval-shaped heatmap visualization. The center is a bright red color, transitioning through orange and yellow to green and cyan at the edges, representing the intensity distribution of the hot spot.</p>

## MEASUREMENT 13

HEAD

Type: Validation measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 11 minutes 36 seconds

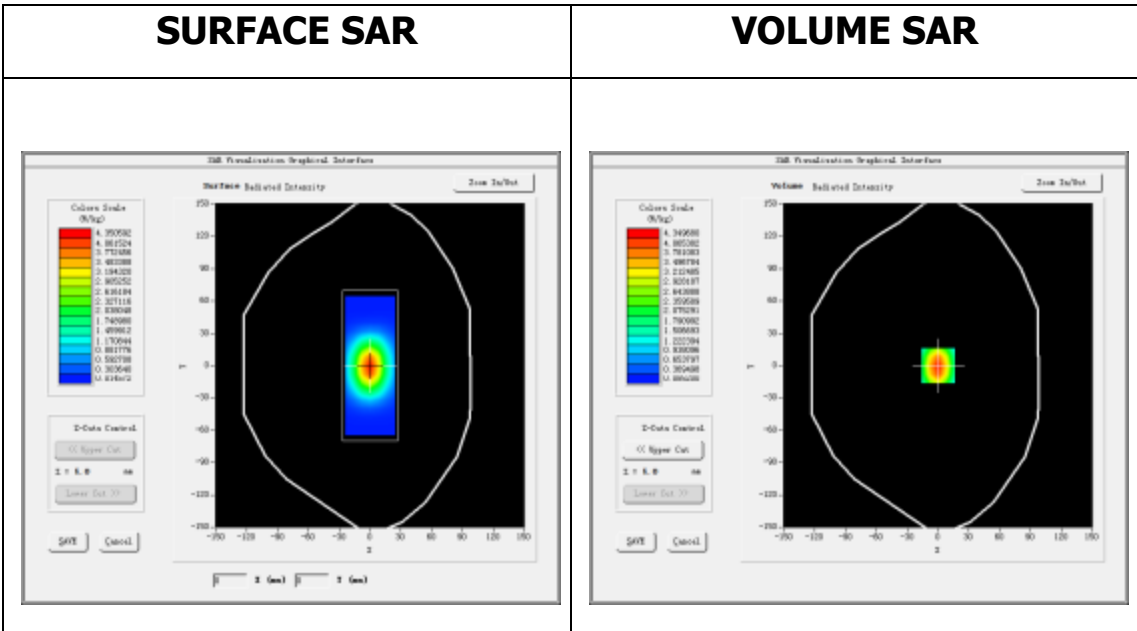
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW5400</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	5400.000000
<b>Relative permittivity (real part)</b>	35.343199
<b>Relative permittivity (imaginary part)</b>	16.591080
<b>Conductivity (S/m)</b>	4.881334
<b>Variation (%)</b>	-0.620000

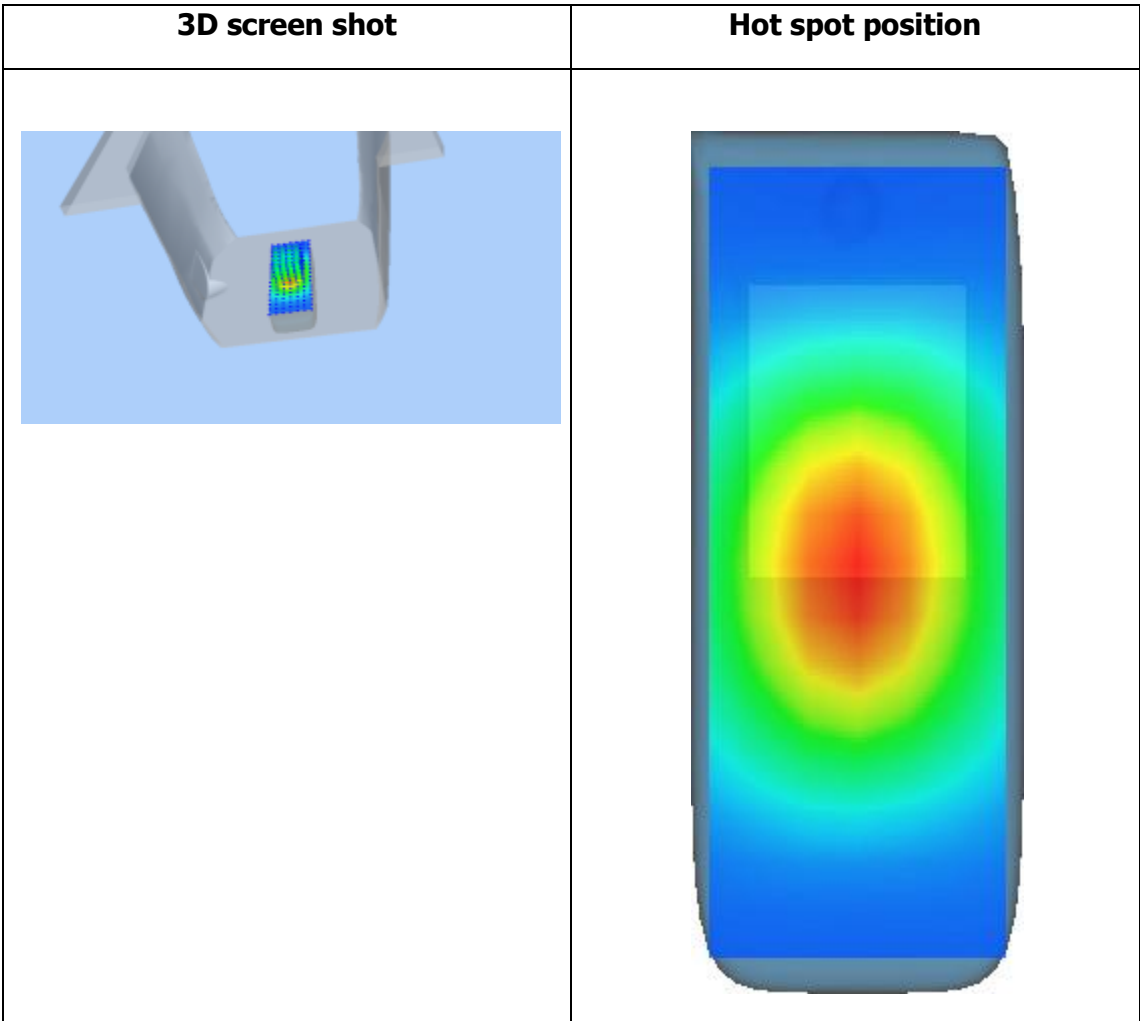
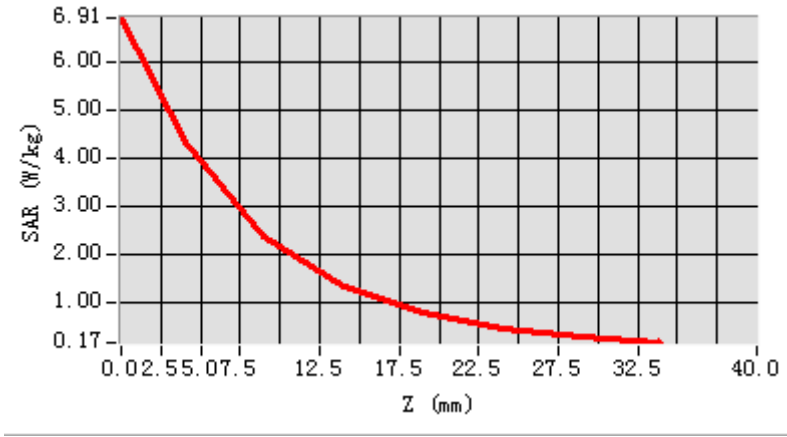


**Maximum location: X=0.00, Y=0.00**

**SAR Peak: 6.87 W/kg**

<b>SAR 10g (W/Kg)</b>	61.56046
<b>SAR 1g (W/Kg)</b>	177.95228

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>6.9135</b>	<b>4.3497</b>	<b>2.3796</b>	<b>1.3511</b>	<b>0.7818</b>	<b>0.4574</b>	<b>0.2733</b>





# MEASUREMENT 14

BODY

Type: Validation measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 10 minutes 36 seconds

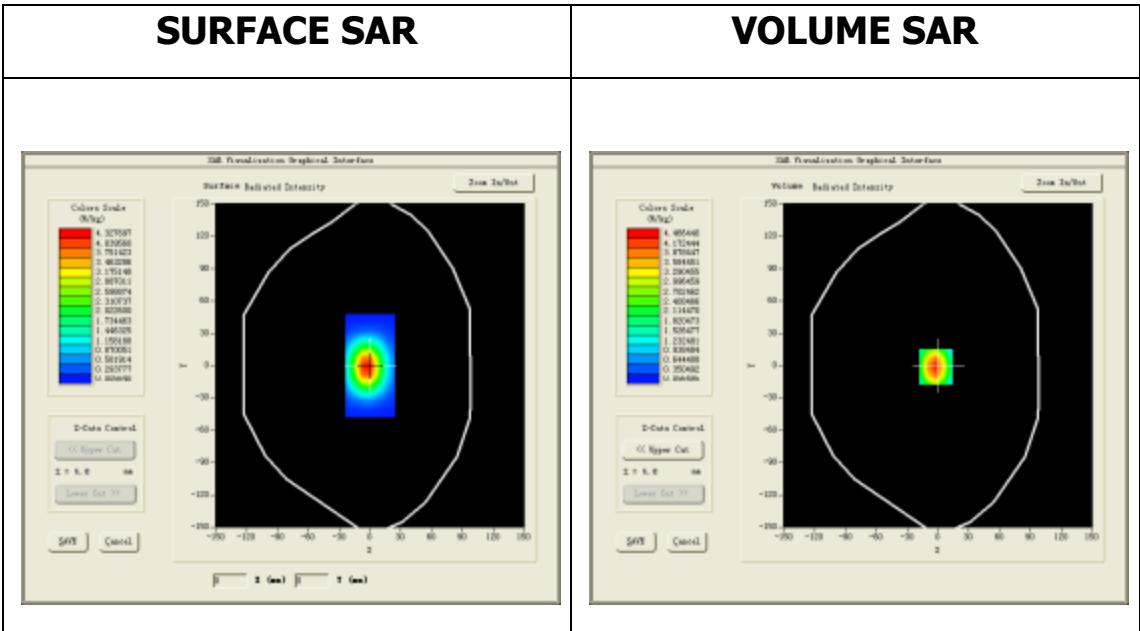
## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW5400</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

## **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	5400.000000
<b>Relative permittivity (real part)</b>	47.944300
<b>Relative permittivity (imaginary part)</b>	18.167566
<b>Conductivity (S/m)</b>	5.353919
<b>Variation (%)</b>	-0.350000

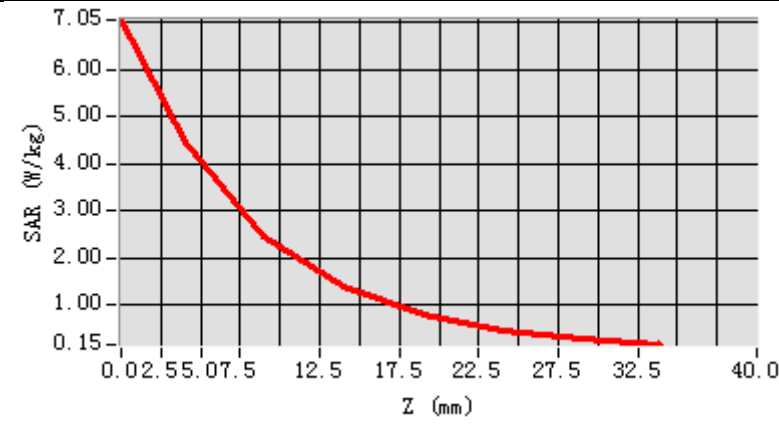


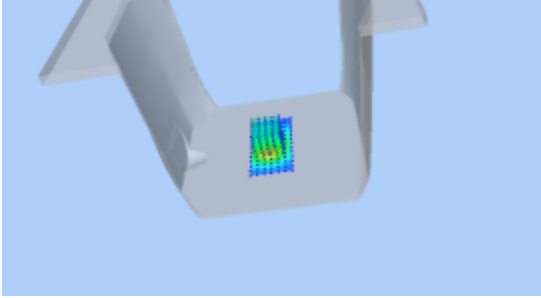
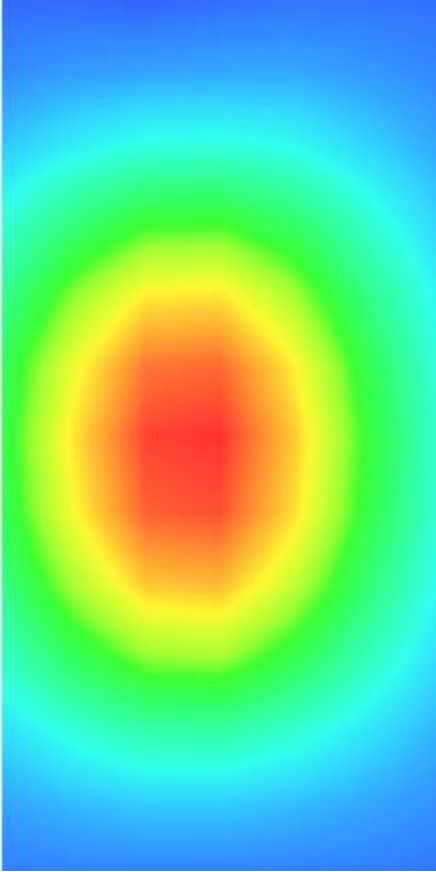
**Maximum location: X=-2.00, Y=-1.00**

**SAR Peak: 7.04 W/kg**

<b>SAR 10g (W/Kg)</b>	58.82132
<b>SAR 1g (W/Kg)</b>	165.37029

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>7.0497</b>	<b>4.4664</b>	<b>2.4603</b>	<b>1.3992</b>	<b>0.7963</b>	<b>0.4560</b>	<b>0.2601</b>



3D screen shot	Hot spot position
	

# MEASUREMENT 15

HEAD

Type: Validation measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 9 minutes 59 seconds

## **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>8x8x7,dx=4mm dy=4mm dz=2mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW5800</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

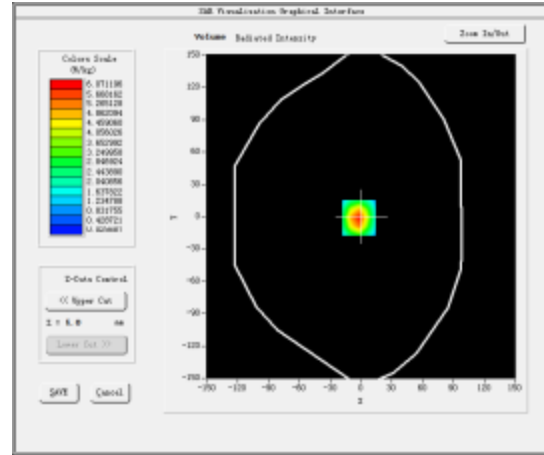
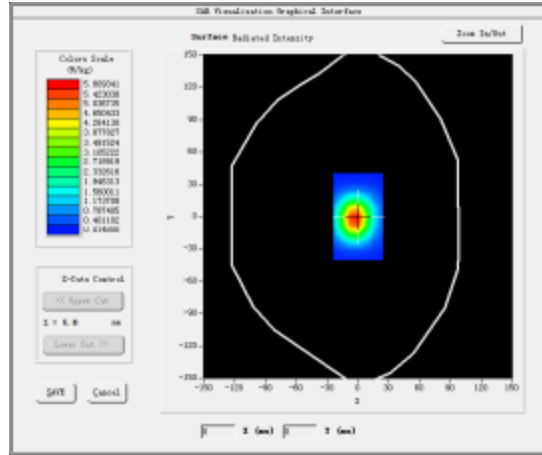
## **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	5800.000000
<b>Relative permittivity (real part)</b>	34.225599
<b>Relative permittivity (imaginary part)</b>	16.160852
<b>Conductivity (S/m)</b>	5.211844
<b>Variation (%)</b>	0.050000

## SURFACE SAR

## VOLUME SAR

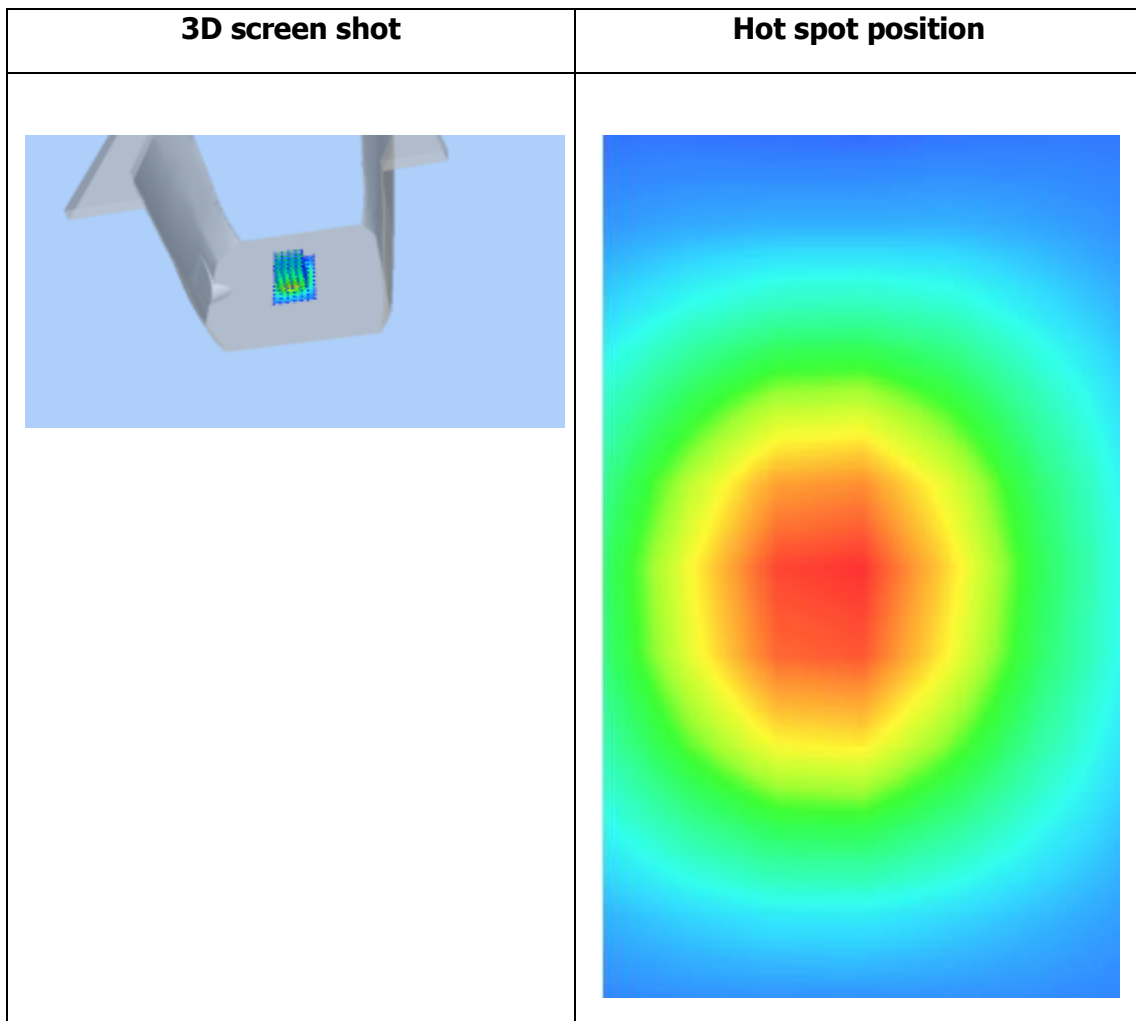
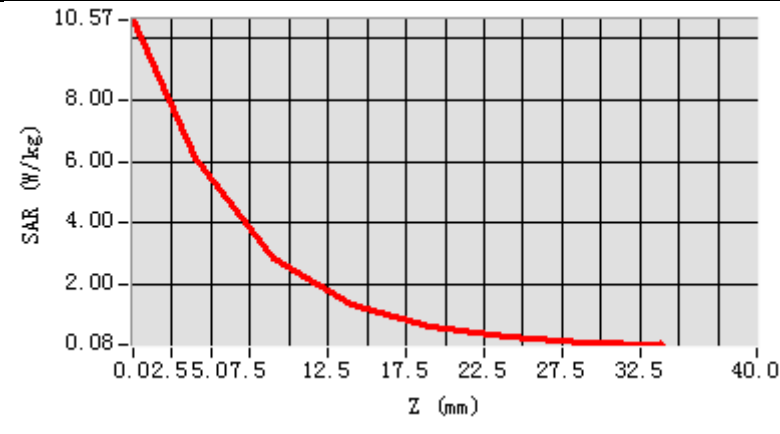


**Maximum location: X=-2.00, Y=-1.00**

**SAR Peak: 10.54 W/kg**

<b>SAR 10g (W/Kg)</b>	63.34043
<b>SAR 1g (W/Kg)</b>	185.19149

<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>10.5655</b>	<b>6.0712</b>	<b>2.8292</b>	<b>1.3565</b>	<b>0.6515</b>	<b>0.3180</b>	<b>0.1553</b>



## MEASUREMENT 16

BODY

Type: Validation measurement (Complete)

Date of measurement: 17/1/2017

Measurement duration: 10 minutes 36 seconds

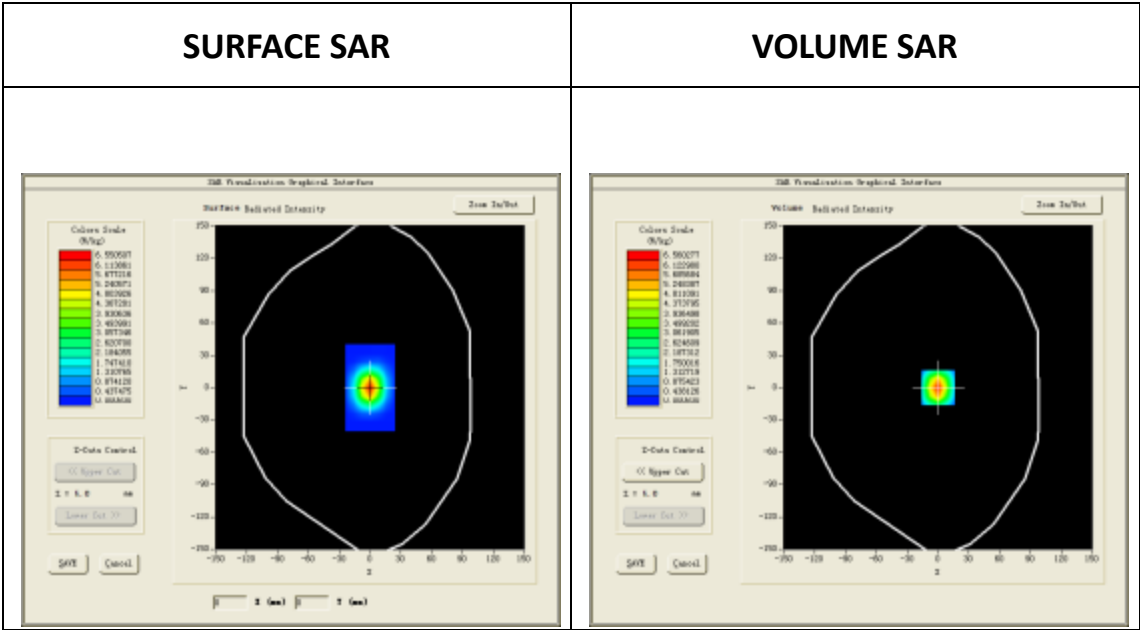
### **A. Experimental conditions.**

<b><u>Area Scan</u></b>	<u>dx=10mm dy=10mm</u>
<b><u>ZoomScan</u></b>	<u>8x8x7,dx=4mm dy=4mm</u> <u>dz=2mm,Complete</u>
<b><u>Phantom</u></b>	<u>Validation plane</u>
<b><u>Device Position</u></b>	<u>Dipole</u>
<b><u>Band</u></b>	<u>CW5800</u>
<b><u>Channels</u></b>	<u>Middle</u>
<b><u>Signal</u></b>	<u>CW (Duty cycle:1:1)</u>

### **B. SAR Measurement Results**

Middle Band SAR (Channel -1):

<b>Frequency (MHz)</b>	5800.000000
<b>Relative permittivity (real part)</b>	48.090699
<b>Relative permittivity (imaginary part)</b>	19.043921
<b>Conductivity (S/m)</b>	6.14163
<b>Variation (%)</b>	0.010000



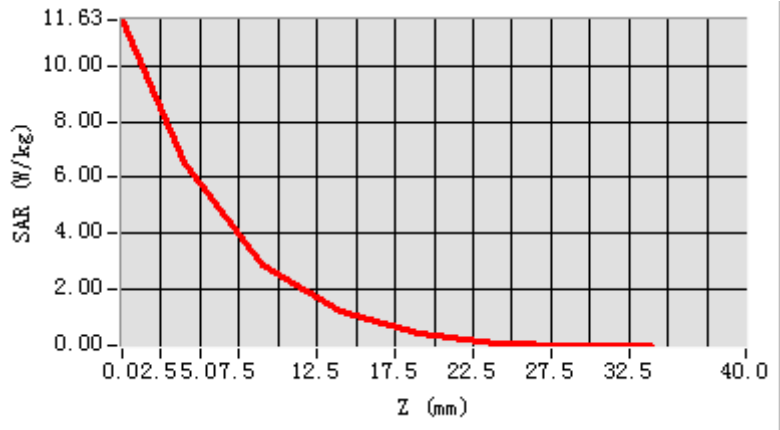
Maximum location: X=0.00, Y=0.00

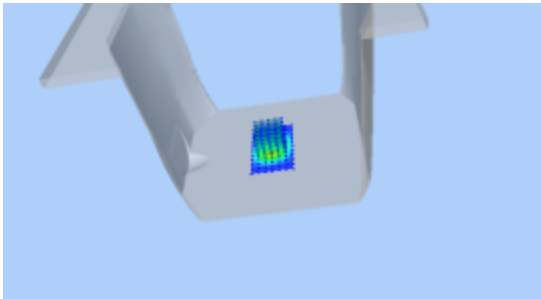
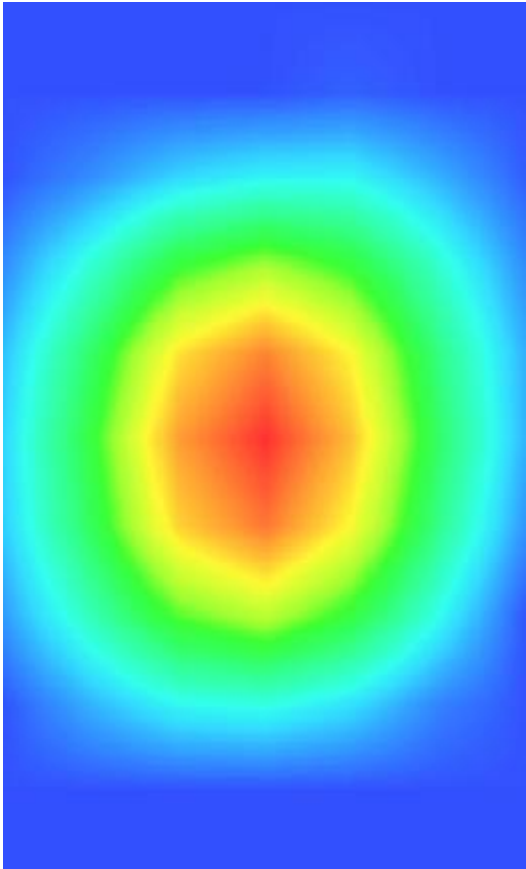
SAR Peak: 11.49 W/kg

SAR 10g (W/Kg)	60.79996
SAR 1g (W/Kg)	179.65831



<b>Z (mm)</b>	<b>0.00</b>	<b>4.00</b>	<b>9.00</b>	<b>14.00</b>	<b>19.00</b>	<b>24.00</b>	<b>29.00</b>
<b>SAR (W/Kg)</b>	<b>11.6340</b>	<b>6.5603</b>	<b>2.8797</b>	<b>1.2004</b>	<b>0.4226</b>	<b>0.1066</b>	<b>0.0008</b>



3D screen shot	Hot spot position
 <p>A 3D perspective view of a grey, L-shaped device. A small rectangular area on the horizontal part of the device is highlighted with a color gradient from blue to red, indicating a hot spot.</p>	 <p>A 2D heatmap showing a circular hot spot. The center is red, transitioning through yellow, green, and cyan to a dark blue background. The hot spot is centered in the lower half of the image.</p>